



Best Management Practices for Construction and Development Projects Interior Least Tern *Sterna antillarum athalassos*

Common name • Interior Least Tern
Scientific name • *Sterna antillarum athalassos*
Federal status • Endangered
State status • Endangered

Purpose and Use

The information in this document is to be used to help avoid and minimize species impacts due to construction practices. It is not intended to be used as a guide to manage habitat for a given species. If that is the goal, please contact the Department of Conservation for habitat management information. Because every project and location differs, following the recommendations within this document does not ensure that impacts will not occur to the species and additional information might be required in certain instances. Following the recommendations within this document does not complete Endangered Species Act consultation that may be necessary for species listed under the federal Endangered Species Act; please contact the U.S. Fish and Wildlife Service for more information.

Ecology

In Missouri, Interior Least Terns historically nested on sandbar islands in the Missouri and Mississippi River valleys but are now restricted to riverine sites on the Mississippi River south of Cape Girardeau. Least Terns nest at the breeding sites from late May through August. They nest in colonies of 10 to 12 pairs on sand islands, and sandbars, in sand or gravel areas with sparse or no vegetation that are well back from the water line. They might also nest on sand or gravel pits and shorelines of floodplain lakes. The nest is a shallow depression that typically holds 2-3 eggs. Egg laying begins by late May and incubation is shared by both sexes and usually lasts 20-25 days. The chicks leave the nest only a few days after hatching, but the adults continue to care for them and bring them food until the juveniles leave the colony during fall migration in September. Renesting may occur as late as August. Interior Least Terns forage along lake and reservoir shorelines, riverine sandbars, backwaters, and river side-channels. Their diet consists almost entirely of a variety of small fishes but they occasionally consume invertebrates.

Reasons for Decline

The Interior Least Tern was nearly exterminated by plume hunters and egg collectors at the turn of the century. Today, nest depredation by mammalian and avian predators can substantially reduce reproductive success especially during periods of low water when

river sandbars may become connected to the shore. In addition, habitat has been destroyed or altered by extensive channelization, bank stabilization projects and the construction of reservoirs, and dams on rivers. This has reduced fluctuations in river flow regimes which has resulted in the loss of sandbars, the encroachment of woody vegetation on islands and the accretion of islands to the riverbanks. The recreational use of sandbars by humans is also a threat to the Interior Least Tern's reproductive success. For inland residents, sandbars are the recreational counterpart of coastal beaches. Activities such as fishing, camping and ATV use on and near sandbar habitat are potential threats to nesting terns. Water pollution from pesticides is another potential threat. Pollutants entering rivers upstream and within breeding areas can adversely affect water quality and fish populations in tern feeding areas.

Specific Recommendations

Sandbars, the preferred nesting substrate, are generally not stable features of the natural river landscape. They are created, enlarged, destroyed, or flooded depending on the dynamics of the river, thus it is important that projects on rivers with potential nesting habitat be planned to provide river flows that do not alter existing habitats and that allow for some diversity of river conditions that would help create new habitat. In addition, because nesting colonies may move from year to year as available habitat changes, it is important to protect potential nesting sites, as well as existing ones.

- River systems inhabited by Interior least terns should be protected from dams and other hydrological developments.
- River flows should be maintained to create and isolate breeding habitat.
- Shallow-water feeding grounds also should be maintained, and active breeding colonies should be protected from human intrusion.
- Human activity, especially with vehicles, should be avoided on sandbars from May through August.
- Sand and gravel bars and islands used by Interior least terns for nesting should be protected from alteration due to construction practices or changes in river flows that would damage the breeding habitat.

General Recommendations

Refer to Management Recommendations for Construction Projects Affecting Missouri Streams and Rivers.

If your project involves the use of Federal Highway Administration transportation funds, these recommendations may not fulfill all contract requirements. Please contact the Missouri Department of Transportation at 573-526-4778 or www.modot.mo.gov/ehp/index.htm for additional information on recommendations.

development projects, and require permits and/or consultation with the appropriate agency. Following the recommendations provided in this document will help reduce and avoid project impacts to the species, but impacts may still occur. Please contact the appropriate agency for further coordination and to complete compliance requirements.

Information Contacts

For further information on construction projects in rivers and streams:

For species information:

[Missouri Department of Conservation](#)

Resource Science Division
P.O. Box 180
2901 W. Truman Blvd
Jefferson City, MO 65102-0180
Telephone: 573/751-4115

For species information and Endangered Species Act Coordination:

[U.S. Fish and Wildlife Service](#)

Ecological Services
101 Park Deville Drive, Suite A
Columbia, MO 65203-0007
Telephone: 573/234-2132

For Clean Water Act Coordination:

[Missouri Department of Natural Resources](#)

Water Protection Program
P.O. Box 176
Jefferson City, MO 65102-0176
Telephone: 573/751-1300, 800/361-4827

[U.S. Army Corps of Engineers](#)

Regulatory Branch
700 Federal Building
Kansas City, MO 64106-2896
Telephone: 816/983-3990

[U.S. Environmental Protection Agency](#)

Water, Wetlands, and Pesticides Division
901 North 5th Street
Kansas City, KS 66101
Telephone: 913/551-7307

Disclaimer

These Best Management Practices were prepared by the Missouri Department of Conservation with assistance from state and federal agencies, contractors and others to provide guidance to those people who wish to voluntarily act to protect wildlife and habitat. Compliance with these Best Management Practices is not required by the Missouri wildlife and forestry law nor by any regulation of the Missouri Conservation Commission. Other federal laws such as the Clean Water Act and the Endangered Species Act, and state or local laws need to be considered for construction and